

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claims 1-9 - canceled.

1           10.   (Currently amended) A vibratable aperture plate comprising:  
2           a plate body having a top surface, a bottom surface, and a plurality of apertures  
3   extending from the top surface to the bottom surface, wherein each aperture is defined by a  
4   tapered portion ~~generally conical cavity~~ which tapers inward ~~extends~~ from the bottom surface  
5   toward the top surface and a flared portion ~~dome shaped cavity~~ that extends from the top surface  
6   toward the bottom surface and that flares away from the tapered portion, and wherein the flared  
7   portion ~~dome shaped cavity~~ and the tapered portion ~~conical cavity~~ have the same axis of  
8   symmetry such that when a liquid is supplied to the bottom surface and the aperture plate is  
9   vibrated, liquid droplets are ejected through the flared portion.

1           11.   (Original) An aperture plate as in claim 10, wherein the plate body is  
2   constructed from materials selected from a group consisting of palladium, palladium nickel and  
3   palladium alloys.

1           12.   (Original) An aperture plate as in claim 10, wherein the plate body  
2   includes a portion that is dome shaped in geometry.

1           13.   (Original) An aperture plate as in claim 10, wherein the plate body has a  
2   thickness in the range from about 20 microns to about 70 microns.

1           14.   (Original) An aperture plate as in claim 10, wherein the apertures have an  
2   exit angle that is in the range from about 41° to about 49°.

Claims 15-30 - canceled.

1           31.   (Currently amended) An aperture plate comprising:  
2           a plate body having a top surface, a bottom surface, and a plurality of apertures  
3   extending from the top surface to the bottom surface, wherein the apertures each include an  
4   upper portion and a lower portion, wherein the lower portion extends upwardly from the bottom

5 surface and is generally concave in geometry, and wherein the upper portion is tapered in a  
6 direction from the top surface to the bottom surface and ~~intersections~~ intersects with the lower  
7 portion which flares outward such that when a liquid is supplied to the top surface and the  
8 aperture plate is vibrated, liquid passes through the upper portion and is ejected through the  
9 lower portion as liquid droplets.

1           32.     (Original) An aperture plate as in claim 31, wherein upper portion has an  
2 angle of taper that is in the range from about 30° to about 60° at the intersection with the lower  
3 portion, and a diameter that is in the range from about 1 micron to about 10 microns at the  
4 intersection with the lower portion.

1           33.     (Original) An aperture plate as in claim 32, wherein the lower portion has  
2 a diameter at the lower surface that is in the range from about 20 microns to about 200 microns, a  
3 height in the range from about 4 microns to about 20 microns.

1           34.     (Original) An aperture plate as in claim 31, wherein the bottom surface is  
2 adapted to receive a liquid, and wherein the plate body is vibratable to eject liquid droplets from  
3 the front surface.

Claim 35 - canceled.

1           36.     (Currently amended). An aperture plate as in claim 10, wherein the  
2 diameter of the tapered portion ~~conical cavity~~ is at least about 1 micron.

1           37.     (Currently amended) An aperture plate as in claim 10, wherein the flared  
2 portion ~~dome-shaped cavity~~ has a height that is approximately one-third of the thickness of the  
3 plate body.

1           38.     (Previously added) An aperture plate as in claim 10, wherein the plate  
2 body has a thickness of at least about 20 microns.